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*      20      40      60      *
exmi009 : -----HNSYQKMYEIDALRINSMSWCYPRTPLAQDPQNTERTNMYEELNNCDSENTQFIGDISTYSSE : 68
cry1Aa : -----HNNNPHINECHPPNCLSNPEVE-VLGGER-- : 28
cry1Ac : -----HNNNPHINECHPPNCLSNPEVE-VLGGER-- : 28
cry1Ca : -----HEEN-NONOCPPNCLSNPEEV-LDGER-- : 27
cry1Ea : -----MKLRKODKHQSFSSNA-KVDKISTDS--LKNETDIEDONINHEDCXKSEYEN--VEP-- : 53
cry3Aa1 : HIRKGGKRNPNPNSDHTDKTTE--NNEVPTNHVQYPLAETPNPTDQDLYREFLRHTADNN--TEALDS-- : 67
cry3Ba : HIRKGGKRNPNPNSDHTDKVTP--NSELPTNHQYPLADNPHTDDEE LNYREFLRHTADNS--TEVLDS-- : 67
cry3Bb : -----MNPNSDHTDKVTP--NSELPTNHQYPLADNPHTDDEE LNYREFLRHTDSS--TEVLDN-- : 59
cry4Aa : -----HNPYQKMYEIDANASOKKLNISNMYTRPIENSFKQLLSTNYQDNNKQNNQYGGDFETFD-- : 66
cry6Aa : -----HIDSKTTLPRHSLIHTIKLNSNRYGPGDHTNGN-- : 36
cry7Aa : -----HNNLNDGYEDSNRTLNLSNMYTOKALSPSDQNNYQDPLSTIEREPE--AL-- : 52
cry8Aa : -----HSPNPNQMYEIDATP--STVSDDSNRTFANEPTDANQNNYQYLNKSGGNEPE-L-FGNPET-- : 62
cry10Aa : -----HNPYQKMYEIDANASNGFSKSNMYSPPLANKPHOPDQNNYQYLNVCODNNQYGMNAGNFAS-- : 66
cry16Aa : -----HHYQGRMYEIDANASNDNSNMYTPPLANPQDQDQNNYQYLNVCCEYHIENP-FAESVR-- : 65
cry19Ba : -----HNSYQKMYEIDAKRNTCHMSWCYPRTPLANDPQNYDQNNYQYLNKCEZASVAS--S-- : 59
cry24Aa : -----HNQYQKMYEIDESSO--N-NMNNPNRTFADDPNAVKKGYQYLNKCEGSGN-- : 52
cry25Aa : -----HNPYQKSCEDIANPLN--N-NMNNPNRTFANDPNAVKKGYQYLNKCEGDTTP-- : 53
cry40Aa1 : -----NSYQKMYEIDESS--N-NMNNPNRTFANDRDMSTHSPDCQGLSUDIEVES-- : 52
                                n e          yp          nyk

*      80      100      120      140      *
exmi009 : AALSVRDAVLTCINSVGTISNLGVPLASQSFQISRTIGILWAGP--DPEALNVLVEEIKKSDQDRVRENAL : 141
cry1Aa : --IETGYTPIDISLSLTQFLSEFYPCAGFTLGLVDINQIGIFCP--SQDAPFVQDEQILTORIELFARNOAI : 97
cry1Ac : --IETGYTPIDISLSLTQFLSEFYPCAGFTLGLVDINQIGIFCP--SQDAPFVQDEQILTORIELFARNOAI : 97
cry1Ca : --ISTGSSIDISLSLTQFVSNFYPCGGFTLGLIDFVGGIVCP--SQDAPFVQDEQILTORIELFARNOAI : 96
cry1Ea : --FVSASTIQTGICGAGGIGTIGVPCAGQASLSYFLGELWP-KGKNQ-EIPEHMEELIKKISTYARKKAL : 125
cry3Aa1 : --STTKVQIKGISVGLDGVGVGFGGALYSFYTNFLNTWPS--EDPEKAPHEQVEALDQKIDYAKKAL : 138
cry3Ba : --STVKDAVGTGISVGGQILGVVGVPFAGALTSFYQSFLNAIUPSD-ADPEKAPHAQVEVLDQKEEYAKKAL : 139
cry3Bb : --STVKDAVGTGISVGGQILGVVGVPFAGALTSFYQSFLNTWPS-ADPEKAPHAQVEVLDQKEEYAKKAL : 131
cry4Aa : --SGELSAYTIIVGTULTGFG-FTTLGLALIGFTLIPVFFPAQDSNTSDFITUTKNLKKCEASTYSNAN : 138
cry6Aa : -----FIISKQEWATIGAYTQGLGLPNEQQLRTHVNLSDISPSDFSLQYDVYCSKTSAEVUNKNLY : 102
cry7Aa : -----ASGNTAINTVYSIGATISALGYGASFTNFYLLKAGLWPEK-GKIDPEFTEEALDQKIDYAKKAL : 124
cry8Aa : -----FISSTIQTGICGAGGIGTIGVPCAGQASLSYFLGELWPSKSVDTGTEPERVEELVQKIDYAKKAL : 135
cry10Aa : --SETIVGVSAQILVGTIGAFAPVLAAGLISGTLPIFPGQSDPANVQDQLNNGGRIQEDKNIINVLIT : 139
cry16Aa : --AGLGLGLGIVSTIVGFGGSEITLDTIGLFYQISELWPEDDTQ--YTQDIDNHQEDLTKRTEVIRGNAL : 136
cry19Ba : --GPSQLFKVGGSTIAKIDG-HIPEVGPLSNVNSLWPTTEEK--TVEDMKYVANKKQELTADFLNRAT : 128
cry24Aa : --ISPSAAITSKIVSIYKTLAKAVASSADSIKSSLGSKTITENNVSOVSHVQYLNKCEGDTTP-- : 125
cry25Aa : --SIFGTLGVLASINISTONLATSISIGDAFALVSSGCEYWPETK--TSPLSVADNRRDREALDQNAINRAT : 123
cry40Aa1 : -----AETTSIGIDILDFLMESLGGDITLFSINGKLIPTN-HQSVSALSCHDLSTIRKEVADSVLSDAL : 118
                                p

*      160      180      200      220      *
exmi009 : R-EDGLGQIHR-LQOTRQALVYKH-----DDNRRPAVTOHAIQDNPEKNMFKKEXERN-----P21 : 198
cry1Aa : S-RIGGLSNLYQ-IEAESFRELEAET-----NPALREERIRIGDNDNSALTTAIPLFAYON-----YQV : 155
cry1Ac : S-RIGGLSNLYQ-IEAESFRELEAET-----NPALREERIRIGDNDNSALTTAIPLFAYON-----YQV : 155
cry1Ca : A-NIGGLGNFNF-IEVFAFKEEEDPH-----NPATRTIRIDGRIDGLLERDPSFRISG-----PEV : 154
cry1Ea : T-DIGGLGALA-VYHDSIESVGCPRN-----NTRARSVKSQIALDELHVOKIPSFAYSG-----PEV : 183
cry3Aa1 : A-EDGLGNVVE-DVYSALSSQKQPVSSR-----NPHSGRIRELISQAESHRNSPSPFAYSG-----PEV : 199
cry3Ba : A-EDGLGNVVE-DVYNADDSKAPVNLN-----SRRSODRIRELISQAESHRNSPSPFAYSG-----PEV : 200
cry3Bb : A-EDGLGNVVE-DVYNADDSKAPVNLN-----SRRSODRIRELISQAESHRNSPSPFAYSG-----PEV : 192
cry4Aa : K-IDNRSFNVIS-TYHNNKKTLEPH-----PONTODERTIQILVHYHQNVLPELVNSCPPNPSPDCDYNN : 204
cry6Aa : PLIKSANDIASYGRKVGCPSPKIDG-----YFKKLODELNDIWNNSDDDAIAKADFKARCQ-----ID : 165
cry7Aa : A-EDGLGSALD-KYOKADALCKQD-----DPEALSLATEIRIDSLIFSPSPFXVTG-----P21 : 182
cry8Aa : A-EDGLGSALD-VYQSDLELEPR-----DARTSVYSNQLIADNLNVSSPSPFAYSG-----HEV : 193
cry10Aa : S-ITPTKQQLD-KQGEFFDKCEPART-----HANAKAHDLETTPEPIIDKQDMLKNAS-----YPI : 197
cry16Aa : R-TADLQGVVD-DNNMKKKQDTPK-----STGNLSTVTRKTADESDNGAIRTVMNQSGP-----GVL : 197
cry19Ba : S-NISGINESLN-IEVRAIAACKQKXK-----NFASGELRSYINDPHILITRDHQDFSLG-----GLT : 187
cry24Aa : S-SINGLVAIYHRDLEGADEANMXS-----NINYQTNAEAKTVERETFKKGIYRTSS-----S01 : 185
cry25Aa : G-KFGLGQTYNTYTLKNNQDDYDTRIPANPQGSOLREARRSLEPERDPRKAGEFAEAG-----S01 : 189
cry40Aa1 : CRFDCKLKNRYEYDHPYDEALRQKPLQKT--MNSDIGQLVKYGLSEKRDNEIIGGSLARIN-----A01 : 184
                                g          5 l w          f 6

*      240      260      280      300      *
exmi009 : LLLPVYQAANLHLILLRDAQVFG-ADQGLGDDERDNNIR-----LOGLTREYKQHLITFNOG : 257
cry1Aa : PLLSVYQAANLHLISVLRDVSVFG-QR-GFDAATNSRQAD-----LTRLIGNITDYAVRQHTIC : 214
cry1Ac : PLLSVYQAANLHLISVLRDVSVFG-QR-GFDAATNSRQAD-----LTRLIGNITDYAVRQHTIC : 214
cry1Ca : LLLPVYQAANLHLILLRDSVIFG-ER-GLTITINNNYR-----LIRHIDPYADHCANTIRP : 213
cry1Ea : PLLSVYQAANLHLILLRDSVIFG-KEGLSSSETSTFNR-----QVERAGDYSDHCAGHSTG : 242
cry3Aa1 : LPLITVYQAANLHLILLRDAQVFG-EEGYEKEDIAEPKR-----QLKLTQCTYDHCWAGHVEV : 258
cry3Ba : LPLITVYQAANLHLILLRDAQVFG-EEGYSESDIAEPOR-----QLKLTQCTYDHCWAGHVEV : 259
cry3Bb : LPLITVYQAANLHLILLRDAQVFG-EEGYSESDIAEPOR-----QLKLTQCTYDHCWAGHVEV : 251
cry4Aa : LLLSVYQAANLHLIYLQAVGDEAYLKNRQFDYLEPLTAL-----DYYPVLTKAEDITNCEVITUKG : 271
cry6Aa : KKEAKQYENAKMTISLQFDQDQKLEGVINQKRLKEVQT-----ALNQAHCSSPAHKE : 225
cry7Aa : PLLSVYQAANLHLILLRDSVIFG-DK-GFTQNNDEENR-----QKKRISVSDHCAGHSTG : 241
cry8Aa : LLLPVYQAANLHLILLRDSVIFG-EEGFTPGESRFAIR-----QVOLTADSDYCWAGHVEV : 252
cry10Aa : PLLSVYQAANLHLILLRDAQVFG-EEGYSESDIAEPOR-----YQG-YLKRQCTYDHCWAGHVEV : 263
cry16Aa : LLLPVYQAANLHLILLRDAQVFG-EEGYSESDIAEPOR-----OLEKTKYEVNCEVITUKG : 257
cry19Ba : VLLPSVYQAANLHLILLRDAVIFG-KELGYPSTDEFFYNE-----QKYTYEYNNCEVITUKG : 246
cry24Aa : TLLPITVQAANLHLISLDAVHYQEGWNQSHINYSKELDD-----ALEDYTNCEVITUKG : 242
cry25Aa : VLLPVYQAANLHLILLRDAQVFG-EEGFTPGESRFAIR-----FESEFLRIKRYDHCWAGHVEV : 256
cry40Aa1 : LLLPVYCASCKCOLLLRDAVQEEQVFPFLSAENVRSELI SPNSGGDFTGDYERLKCKTAPYDHCWAGHVEV : 259
                                l a a n h6 l d a g          y          y c y g
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Fig. 1A

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    320      340      360
axmi009 : DNQFNR-----SNAQDVSSTFRFRIDHTLTVDLALFFVDPRRY-----LAVKTELREYTDPPVGGFTGVL : 321
cry1Aa : DERVWG-----PDSRDVVRVQFRRELTLTVDLVALFFSVDSRRY-----QRTVSQLTREYTNTPVLEN--- : 275
cry1Ac : DERVWG-----PDSRDVVRVQFRRELTLTVDLVALFFSVDSRRY-----QRTVSQLTREYTNTPVLEN--- : 275
cry1Ca : DNDLPK-----STYQDHTVYRDRDRLTLVDLIAAFSTDMRRY-----IQPVGQLTREYTDPIINFPQ : 277
cry1Ia : DNDLRG-----TNAESVVRVQFRFRIDHTLTVDLVALFFSVDTOMTY-----DCTTAQLTREYTDAGTVHPH : 306
cry3Aa : DNDLRG-----SSYVWVYRFRRELTLTVDLIALFFLTDVRLTS-----KEVKTLETRDITDPIVGVN--- : 320
cry3Ba : DNDLRG-----STYDANVVRFRFRRELTLTVDLILVFFVYDVRLS-----KGVKTELTRDITDPIFTLN--- : 321
cry3Bb : DNDLRG-----STYDANVVRFRFRRELTLTVDLILVFFVYDVRLS-----KGVKTELTRDITDPIFTSLN--- : 313
cry4Aa : DNDLKTTPDSNLDGNINENTNYVTKETITAVDLVALFFVYDVKTY-----ICVQSELTREYTNQVLNFEES--- : 339
cry6Aa : DEKQKN-----LK-----TTLDRTQAEQDEKKVEVSFLLCG-----LLGFVYVLENTAVQHIKN : 278
cry7Aa : LSRVWG-----STYQDHTVYRFRRELTLTVDLIALVAVFTDPPRRY-----DETSTQLTREYTDPPVSLISN : 305
cry8Aa : DNDLRG-----TTSKSLVVRQFRRELTLTVDLIALFFVYDTHMT-----DETTAQLTREYTDPIAFNIVT : 316
cry10Aa : DNDLRG-----NTNATNNHMYRFRRELTLTVDLIAFFVYDPEKY-----ICVQSELTREYTNVNSDT--- : 324
cry16Aa : DNDLF-----RTAGQVVRFRFRRELTLTVDLIISHPHTDARLY-----TEVKTLETREIFSDVNGEIVG : 319
cry19Ba : DESK-----KQIG-----GSDFRFRFRRELTLTVDLIALFFVYDGLYPSKDGKDEKALREIFSDVNDHVVG : 312
cry24Aa : DNDLRG-----STADIDVFRFRFRRELTLTVDLIALFFVYDVRVY-----LSTKISLSKLTIDPPVGRDSP : 306
cry25Aa : LAKDRSRG-----SDGETWVFRFRFRRELTLTVDLIALVYTHIKLY-----IPTQELSRVYTDPPVCGFGR : 322
cry40Aa : DNDLRG-----TGADTQVFRFRFRRELTLTVDLIAITQVDFKLY-----LPTHVELTREYTDPPVGYSSGT : 325
L      u n r r e t v l d a p y y p      6 r e 6 p

    380      400      420      440
axmi009 : ESGGRTPVYVNPNTITTAQNNARSRPSYTTNNRFRVYRTLGMS-----DVRNIGCHTLVENGMDGSEIT : 391
cry1Aa : -----FDGSFRGAQRIEQNGPHDIDNSTIYDVHRG-----FHYVSCQITASPVGFSGP- : 331
cry1Ac : -----FDGSFRGSAQRIEQNGPHDIDNSTIYDAHRG-----FHYVSCQITASPVGFSGP- : 331
cry1Ca : -----LQSVQALPTTNVHSSALNPHLDIDNNMTTFDWFVGR-----NFYVSCQITASPVGFSGP- : 336
cry1Ia : PSF-TSTTVVWNNAPSFSAIDAAVVRPHLDLEQVITYSLLS-RU-----SNTQYNNHGGCHKLEFRTI- : 370
cry3Aa : -----NLRGYGTTFNINENYRPHLDLHRUQPHRFPQGYGN-----DSFNYSCHVYSTRPSIGSND- : 382
cry3Ba : -----ALQYGTTFNINENYRPHLDLHRUQPHRFPQGYGN-----DSFNYSCHVYSTRPSIGSND- : 383
cry3Bb : -----TLQYGTTFNINENYRPHLDLHRUQPHRFPQGYGN-----DSFNYSCHVYSTRPSIGSND- : 375
cry4Aa : -----PYKYVDFQVQDLSLRPHLDLHRUQPHRFPQGYGN-----NFTSHYNNHFTLDNIS- : 395
cry6Aa : -----QIDEIKKQDSADHLDLHRUQPHRFPQGYGN-----AIKVPQKLOGIWTAGQIE : 340
cry7Aa : -----PDIGPFSQNTATPHLDLHRUQPHRFPQGYGN-----IQPDLFYSARHVSFKKSEQSN : 367
cry8Aa : STG-FCNPUSHTSGILTYEYVVRPHLDLHRUQPHRFPQGYGN-----NNDAYINYSCHTLKYRT- : 382
cry10Aa : -----FRTITELNGLTNPDLTINQGRFYRNSRDILDP-----YDIFSTQCHAFTHNDDNRN : 382
cry16Aa : -----LMTPTVSTFKASLYTHAPHLTLNKGFRFVNSIS-----YDTFLSCGKNYSVTNNS-S- : 374
cry19Ba : -----LHVPYISFEHASSLYTHAPHLTLNKGFRFVNSIN-----SUTFLSCGKNYSVTNNS-S- : 368
cry24Aa : SFG-DWNTGRTLANFNDLREYVDSPLVNGEDFTTYGADISYRPTSPGDRIGVYVYVINA FYHTGRDVV : 379
cry25Aa : KS-----DIFSRNLFDYENRLTNPREFPVNSVQFASTVSNNSNG-----EVLRLNKNIFEGGWTAS : 384
cry40Aa : YS-----ULKVVTGAFNTLNGTSGGCVTLNLSHGITYNYVSRYSFG-----LVGTRHYEDYTTGNGNFO : 387
r p h      6      g

    460      480      500      520
axmi009 : HNFQKTDSTIPQYFNANLVSFIESLARVYLGCTEANNYITSOYGSRYVINTSNINNVP---G---SLRYEV : 460
cry1Aa : EFAPFLFGNAGNAAPP-VLVSLTGLGFFKTSPLVRRILGSGPNQOELFVLDGTEFSFASLTNLPSTIYROR : 405
cry1Ac : EFTFPLGTMGNAAPQQRVYQALGQGVYRSTLTLYRRFPN-IGINNQQLSVLDGTEFAYG-TSSNLPNAVYRKS : 404
cry1Ca : -----TSLIYGREANQEP--RSFTFNGPVKTLNPTLRLQQPWPAPPFNLRGVEGVFSTP-----TNSFTYRGR : 403
cry1Ia : GGTLLNISTGCTNTSINPVTLPFTSRDYYRTELAGLNLFLTPQVNGVPRVDPHWKVTHPIASDNFYYPYAGI : 445
cry3Aa : IITSPFYGNKSEPVQ--NLEFNGEKVYRANNTNLAVVPS-AVYSGVTKVFSQYNDQD--EASTQTYDSKRY : 451
cry3Ba : TITSPFYGNKSEPIQ--KLSFDGQKVVYRANTDIAAFPDGKIYFGVTKVDFSOYDQKN--ETSTQTYDSKRY : 454
cry3Bb : TITSPFYGNKSEPVQ--KLSFDGQKVVYRANTDIAAFPDGKIYFGVTKVDFSOYDQKN--ETSTQTYDSKRY : 446
cry4Aa : ---QKSVFNGENVDKLSGLATNIYIFLNVISLDNKYLNMYNMSKEDFTITNGRLLEKELTAGSGQITY : 467
cry6Aa : NLRTTSLQEVQSDDADEIQIELEDAWVVAQEARFTLMAYSTNSRQNLPIVNSDS-----CNCS- : 406
cry7Aa : IITGIVGKTSGYISSG--AYSFHGNDLYRTLAPSVVVYPTONYGEOVEFYGVKGVH-----YRGD : 430
cry8Aa : ADSTVITYTANYGRITSEKNSFALEDRIFFDNTSTANLANYYQKAYGCPGSWTHRVKRTSSTAYLYSKHTAL : 457
cry10Aa : IUGAVHGNIIISQDTSKVPFPRNPKIDKVEIVRHYSDIYEMIFFSNSSEVFRYSNS-----TI : 445
cry16Aa : INEGSFRQDQTYGGTSSITNIPNSVYVNTENYEVYIPUGDPVNTKDNFVTDNNS-----KELIYGAHRT : 445
cry19Ba : IYNGPFLQDTEYGGTSSYIDISNNSIYNVTKNYEUIYPTDPMVNTKDNFVTDNNS-----SESIYGAERN : 439
cry24Aa : MFROTGDYVEDPSTFISNLYDDIYKDLRAAAVSTIQGADTTFFVSSRFDFIRGRNQ-----LQOS : 444
cry25Aa : RSGDGVTTGTPTSTMDUSYGCYGPYKAYEITSRQALPCLNLSIHVYVQIDSFRAIGPGG-----QGDHTFSL : 453
cry40Aa : RNSGTTNSDLRDISFPNSDIKIESEKATNLNVLGEINARPEYRVSRAEFSESTAFIYLYDAG----- : 448

    540      560      580      600
axmi009 : PANLPSOTILSELCKDKPRNAGDPSHSYISNFDARRSS-SGGIVSLLTSCNTHSDRMNREPPQITDID : 534
cry1Aa : G-----TVDSLVDIPQDNVSVPRAGFSRSHVTHLSQAAG--AVYTLRAPTFSDRDAEFNLIIPSSQITQIP : 474
cry1Ac : G-----TVDSLDEIPQNNVSVPRQGSRSRSHVTHLSQAAG--AVYTLRAPTFSDRDAEFNLIIPSSQITQIP : 475
cry1Ca : G-----TVDSLDELPEDSVSVPRQGSRSRSHVTHLSQAAG--AVYTLRAPTFSDRDAEFNLIIPSSQITQIP : 471
cry1Ia : G-----TOLQDSENEIPPEATGQVYVSHRSHIGLISAS-----HVKALYVSHRSHVTHLSQAAG--AVYTLRAPTFSDRDAEFNLIIPSSQITQIP : 511
cry3Aa : NVGAVSVDSDIDOLPETTDELEKQSHQNYHCFMLMOGR-----GTFPFLNTHRSDVDFPMDSKKQITQIP : 521
cry3Ba : NGYLGADSDSDIDOLPETTDELEKATSHQNYAECFLMODRR-----GTFPFLNTHRSDVDFPMDSKKQITQIP : 524
cry3Bb : NGHVSADSDSDIDOLPETTDELEKATSHQNYAECFLMODRR-----GTFPFLNTHRSDVDFPMDSKKQITQIP : 516
cry4Aa : DVMKNIIFGLPILKRRENOGNTLFTYDNYSHILSFIKLSIPATYKTQVYTAHTSSVDPKQITHTLTQIP : 542
cry6Aa : TMTNSQYNSPTNTMTSNOYMSHEFTSLPNPHLSRNSNLEYKCPENNFMVYNNSDVYNSDYYN----- : 475
cry7Aa : NKYDLTYDSIDOLPPDG--EPIHEKTHRCHATAIFKSTPDYDN--ATIPFSTHRAEYVRYPMKQITQIP : 501
cry8Aa : QGCTQVYESSDEILDRIT-VTVAESRSRSHVTHLSQAAG--AVYTLRAPTFSDRDAEFNLIIPSSQITQIP : 530
cry10Aa : ENNYKRTDSYHLPKQITWK-----NEEYGHNTSYKTDNYIFSVVR--ERRRVASSTHRAEYVRYPMKQITQIP : 514
cry16Aa : NKPVVTRDIDFLINKEGTELAKYNDNYHLSYHLINGETFGQ-----KRHGYSDHRAEYVRYPMKQITQIP : 516
cry19Ba : NKPTVTRDIDFLINRACGFTTYNDNYHLSYHLINGETFGQ-----KRHGYSDHRAEYVRYPMKQITQIP : 510
cry24Aa : NKPPYSLPITITFGCESSGNDFTSLCDVKIQEDSSNICEGRSSLSHANTHSLDRNMLPDELITQIP : 519
cry25Aa : PGGDHYDCGVQDIDFLYRSDHWSHDTINQSVQLASNPQTQFASLSLCHSSAGNRVYVYVRYPMKQITQIP : 528
cry40Aa : NSGLSSMTITSKNGIKNPFESYRDSRHSNAAACVGCAGNSR-----INVYGHNTSYKTDNYIFSVVR : 516
p      p      h      5th s n itq p

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Fig. 1B

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axmi009 : AVKGGGN--IGFVI--PCPTGGNLVAVSDSWHS-----LKVOAP--QRQTSYRIRLRYACLVTGDAIFVEH : 596
cry1Aa : LTRSTMG--SGTSYVKGPGHTGGDILRRTSPG-----QISTLRVNITAPLSQRYRVRIRYASTTNLQFHTSIDG : 542
cry1Ac : AVKGNLIF--NGSVHS--GPGHTGGDLVRLNSSGNNIONRCYIEVPIHFPSTSIYRVRVRYASTPIHLNNGN : 547
cry1Ca : LVKGFYVW--GGTSYVKGPGHTGGDILRRTSPG-----DFVSLQVNINSPIQRYRIRLRYASTSDARVYVLTGA : 539
cry1Ia : LVKAFNLS--SGAAYVRGPGHTGGDILRRTMTG-----TFGDIRVNINPPFAQRYRVRIRYASTIDLQFHTSING : 579
cry3Aa1 : LVKAYTQO--SGASTVAGPRFTGGDILIQCTE-----NGSAATYVTPDVSYSSOKYRIRIYASTSQITFTLSDG : 589
cry3Ba : VVKAYALS--SGASTVAGPGHTGGHLLFLKESS--NSIAKFKVTLNSAALLQRYRVRIRYASTTNLRLPVQNSN : 594
cry3Bb : VVKAYALS--SGASTVAGPGHTGGHLLFLKESS--NSIAKFKVTLNSAALLQRYRVRIRYASTTNLRLPVQNSN : 586
cry4Aa : AVKANSIG--TASKVYOGPGHTGGDLIDFKDHFK-----ITCOHSNFQOSYRIRIRYASNGSANTRAVINL : 606
cry6Aa : ----- : -
cry7Aa : AVKMYKD--DPSTVYKPGHTGGDLVKGSTG-----YIGDIKATVNSPLSQRYRVRIRYATNVSGQFNVYIND : 569
cry8Aa : AVKGDMLY--LGGSYVKGPGHTGGDILKRTNPS-----ILGTFAVTVNGSLSQRYRVRIRYASTIDFEFTLYLG- : 597
cry10Aa : ALKALKVS--SDSPVYKPGHTGGDILVILKDS-----MDFRVFLKQVSRQYRVRIRYATNAPKITVFLTGI : 579
cry16Aa : VVKASSIN--GSISLEKPGHTGGDLVKGKADS-----GLTRFKAEILLDKYRVRIRYKCNYSKLLDKRWK : 582
cry19Ba : AVKTNLVG--ANIIK--GPGHTGGDILLKLEYER-----FLSLRIK-LIASNTPRIRIRYASNISGQMMING- : 572
cry24Aa : AVTAYELR--GNSSYVKGPGHTGGDLVQMSYHS-----VUSFKVYSELKNYRVRIRYASHCNCQFLKRWK : 584
cry25Aa : ATKTVREHP--HKKPGHTGGDLADLSSNS-DILQVLRSDYDRLTEDVPRIRIRYASHCIGVSTLSDVNSN : 597
cry40Aa1 : AVKAFDLSDTGPGGVLAGPGHTGGHVVSLPYYSR-----LKRLIPASTNKNYRVRIRYASTNGLLVERWS : 584
      k          gpg tgg          r r rya

axmi009 : S--GSSHIVSFDCSNSSGRPSNTLLESDRYIDVPGITPSPIN--PLRYRTQSGF-----THANDFEFIP : 660
cry1Aa : RPIHQG-----NFSANSSGSMQSGSRRTVGFITPFPNSNGSSVFTLSAHVFNHG-----NEWYIDRIEFIP : 605
cry1Ac : SSIFSN-----TVPAATSLDNDQSSDGYFESANATSSLGN--IGYRNFSGT-----AGYIDRIEFIP : 607
cry1Ca : ASTGVGGQVSNMPLQKQTEIGENLESRIDRYTDFSNPFSFRANPDIIIGSEQPLFCAGSISSGELYIDRIEHL : 614
cry1Ia : KAINQG-----NFSANMRGDDYKIDRTVGFITPFSFLDVQSTFTGANNFSSG-----NEWYIDRIEFIP : 642
cry3Aa1 : APFNQY-----FDKINKGDTLYNSNLAESTPFLSG--NNLQNGYTGLSAG-----DKYIDRIEFIP : 650
cry3Ba : NDFLVY-----INKNNIDGDLTYQIDFATSNSNMGFSGDTNDFLGAESFVSN-----EKYIDRIEFIP : 657
cry3Bb : NDFLVY-----INKNNKDDDLTYQIDFATINSNMGFSGDKNELINGAESFVSN-----EKYIDRIEFIP : 649
cry4Aa : SIPGVAELG-MALNPTFSGIDYTNKQYKQOYLEFSNEVKFAPNQNISLQFNRSDVYTN--TTVDIDRIEFLP : 676
cry6Aa : ----- : -
cry7Aa : KITLQTKFQ-----TVEIGEGKDIYGSFGYIEYSTTIQFPDEHPKITLHLSDLN-----SSFYVDSIEFIP : 635
cry8Aa : DTIEKN-----RFEKINDNGASLYETPKFASFTIDFQFRETQDKILSMGDFSSG-----QFYIDRIEFIP : 660
cry10Aa : DTISVELP--S--TTSRQNPATDLYADFGYVTEPRTPNKTPEGEDTLMLTLGYTPN--HSYNDYIDRIEFIP : 648
cry16Aa : GEGYIQQIHN--ISPTYG-----AFSYLESFTIITENIFDLMEVTPYGRQFVEDIP-----SLIDKIEFLP : 646
cry19Ba : --YQNPTFYF--IPTSRDYTEKTFEDQLVDTSYIYSGGSISSNTULDNFSNG-----PVYIDKIEFIP : 636
cry24Aa : STGVAPROUAR--HNVQGTFSNSRYEAPKYLDIFITPEENN--FAFTIDLESNG-----DLIDKIEFIP : 647
cry25Aa : SSSPQVT-----VASLAASLDTKYESQYVSIPGNYFDSAPRILDQPGR-----LDVDRIEFIP : 655
cry40Aa1 : P--S-----STINSYFPLPSTGPGDSGYVDTLVTFNQPGEIIONLDTF-----LDVDKVEFIP : 639
      f          d ef p

axmi009 : LNTFFPNQSL-----KREQEYVNLFIN : 682
cry1Aa : AEVTFEAEY--DLERAQKAVNLELT : 628
cry1Ac : VTATLEAEY--DLERAQKAVNLELT : 630
cry1Ca : ADATFEAES--DLERAQKAVNLELT : 637
cry1Ia : VEVTFEAEY--DFEKAQEKYALIT : 665
cry3Aa1 : VN----- : 652
cry3Ba : VQ----- : 659
cry3Bb : VQ----- : 652
cry4Aa : LTRSIREDREKQKLETVQOITLTFIA : 702
cry6Aa : ----- : -
cry7Aa : VQVNYAEKE--KLEKAQKAVNLELT : 658
cry8Aa : VDETVEAEQ--DLEAKKAVNLELT : 683
cry10Aa : LITQSVLDYTEKQNEKTOKIYVQDLV : 674
cry16Aa : TN----- : 648
cry19Ba : LGITLNOAQ--GYDTYDONAGGEGH : 659
cry24Aa : VSGSAFEYEGKQNEKTOKAVQDLFI : 673
cry25Aa : VVFFPLSEQ-----E--NKSVMLELI : 674
cry40Aa1 : VNSTALEYEGKQSEKAQVYVQDLV : 665

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Fig. 1C